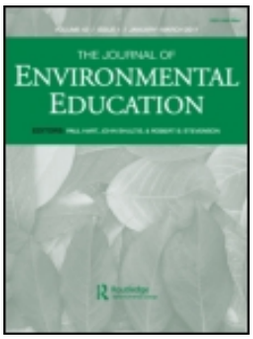

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ESSAY/ANALYSIS

Imagination and the Cognitive Tools of Place-Making

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In environmental and ecological education, a rich literature builds on the premise that place, the local natural context in which one lives, can be an emotionally engaging context for learning and the source of life-long concern for nature. A theory of imaginative education can help uncover new tools and strategies for place-based educators. Conversely, a focus on the imaginative dimensions of place-making sheds new light on the nature of imaginative development, with important implications for educational theory and practice.

Keywords *imagination, imaginative education, place-based education, place-making, sense of place*

IMAGINATION AND PLACE IN ECOLOGICAL EDUCATION

Place as a concept is increasingly attracting the attention of researchers in a variety of fields, including sociology, psychology, architecture, leisure studies, literary theory, education, geography, philosophy and cultural studies (Ardoin, 2006; Gruenewald, 2003a, 2003b). In the widest sense of the term, "place" includes all the particulars of nature and culture that locally shape human perception of, and participation in, the world (Tuan, 1971, 1977); hence, places are socially, culturally, economically, politically, geographically, and ecologically diverse (Ardoin, 2006; Bowers, 2008; Greenwood, 2008; Gruenewald & Smith, 2008; Nespor, 2008).

Place-based diversity was long viewed as an obstacle to modernization, or at best as a problem to be managed, and even postmodernist critique has tended to overlook place in its championing of individual and cultural diversity. Today, however, place is emerging as a key concept in theories of the middle ground, between individual experience and social-ecological context. Equally, place is seen as a valuable resource for human development and environmental sustainability, but one that is everywhere under threat from the forces of globalization and homogenization. We are concerned in this article with place in both of these senses: as theoretical concept and as

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threatened resource. Place-making, or the active engagement of human beings with the places they inhabit, is the process at the heart of this inquiry.

Our purpose here is to explore the imaginative dimensions of place-making. This work stems from our involvement over the past several years with the application and elaboration of Kieran Egan's theory of imaginative education (Egan, 1997, 2005) for a variety of educational purposes, including imaginative ecological education (Judson, 2008, 2010), and culturally inclusive teaching in schools with significant Aboriginal student populations (Fettes, 2005, 2008). We shall return to Egan's theory below, but first we shall sketch some general grounds for this exploration.

Three aspects of place-making immediately suggest a role for the imagination: the fact that it is deeply affective as well as cognitive; the active mental "reaching out" it entails; and the sense of possibility it implies. We shall expand briefly on each of these.

A sense of belonging to a specific, localized community is one of the most profound sources of human identity (Ardoin, 2006; Relph, 1976). A wide range of literature in ecological education emphasizes the psychological well-being mediated by a sense of affective connection with the natural world (Orr, 2005; Roszak, Gomes, & Kanner, 1995; Traina, 1995a, 1995b, 1995c). Many authors note the importance of this emotional dimension for sustainability: if we come to feel personally connected to the natural world, or to a particular cultural community, we will be more likely to protect it (Ardoin, 2006; Sobel, 1999). This love of place typically involves, and promotes, intimate and detailed knowledge of its rhythms, inhabitants, and history. Knowledge and love go hand in hand. This close relationship between cognition and affect is characteristic of the imagination (Brann, 1991; Egan, 1997), and contrasts with the Western tradition of dispassionate analysis that still wields great influence on modern curricula and pedagogies. Few teachers, in our experience, will identify one of their central challenges as getting students to *feel* something about a topic; instead, the emphasis is almost always placed on acquiring *knowledge* or *skills*. We believe that such a conception of teaching is fundamentally inadequate to place-based education (see also Kentel & Karrow, 2010).

Place-making is also an active, willed process, not a passive one. A place exists as a place for us because of the effort we expend relating to it. The passive knowledge that develops through frequent contact or second-hand descriptions and explanations may provide resources for place-making; however, it is our mental reaching out to grasp the possibilities of a place, its past, its future, its meaning for us, that really shapes the relationship. While this is clearly true for human communities (Fettes, 1998), we shall argue throughout this article that this also holds for the development of an *ecological understanding* of the world, a sense of the human world as part of, not apart from, nature—of humankind's "implicatedness in life" (Orr, 2005, p. 105). This active, creative power of the imagination lay at the heart of the Romantics' fascination with the concept, and continues to fuel cultural and literary explorations of many kinds (Brann, 1991; Kearney, 1988).

Along with its affective and active dimensions, place-making also entails a sense of possibility. By this we mean two related things: that there is more to a place than meets the eye, an inexhaustible and ever-present depth of meaning; and that a place could be other than it is, with manifold implications for the relationships that constitute it. Many environmental activists have testified to the significance of seeing a familiar, loved place change under the impact of development, pollution, over-exploitation, and other human practices; a sense of this fragility becomes part of their relationship with all other places as well. Similarly, a vision of what their own community might become, in their own lifetime or that of their children, fuels the passion of many place-based cultural activists. But place does not simply supply a blank canvas for

the projection of such visions—it demands an ongoing, open-ended effort at understanding its complexities and embeddedness in relationships, and adapting our visions to those realities.

These three features of place-making–emotional engagement, active cognition, and a sense of possibility–are all hallmarks of imagination, in the modern understanding of the term (Warnock, 1978; White, 1990; Brann, 1991). In much educational discourse, the imagination is marginalized; where it is accorded a significant place, it is almost invariably in association with language and the arts (Greene, 1995). In recent years, however, there has been a growing swell of interest in the role of imagination in education across ages, disciplines, and cultures (Egan & Nadaner, 1988; Jagla, 1994; Egan, Stout, & Takaya, 2007; Jones, Clarkson, Congram, & Stratton, 2008; Judson, 2008, 2010; Leonard & Willis, 2008). It is this more universal understanding of the imagination that will concern us here. The various thinkers and educators who use the term hardly share a uniform interpretation of it, but they concur in viewing it as a much more fundamental aspect of human thoughts and actions than has generally been recognized—as a mental capacity, shaped through culture and individual history, that imparts a kind of creative energy to our understanding of the world.

In our own work, we are inclined to push this integrative conception of imagination even farther, to include the ways in which the body is implicated in our understandings of the world and our creative responses to it. That is, imagination is fuelled not only by emotional engagement and intellectual effort, but also by the fullness of our physical being-in-environment. Imagination is enriched by opportunities to feel, to think, to experience, and is impoverished or constrained by their lack. But imagination is also vulnerable to the imposition of routine ways of feeling, thinking, and experiencing, a kind of "scripting" that makes deep understanding or creative originality hard to attain. Thus imaginative education requires sensitivity and vigilance on the part of teachers to keep the imagination alive and developing in the face of much in contemporary culture that tends to stunt and deaden it.

We therefore regard a theory of imaginative education as a contribution to the emerging tradition of critical place-based education (Bowers, 2008; Greenwood, 2008; MacKenzie, 2008; Morehouse, 2008; Smith, 2008; Stevenson, 2008), as well as an extension of the literature on ecological imagination (Daloz, 2004; Jardine, 1998; Judson, 2008, 2010; Kentel & Karrow, 2010; Orr, 1994, 2002; O'Sullivan & Taylor, 2004). The model we propose here is intended to assist teachers in bringing imagination to the fore of their teaching, something they may not tend to do in any systematic way, given its marginal place in dominant approaches to teacher development (Chodakowski, 2009). While on the one hand imaginative place-making can serve as a significant resource for the development of ecological and sociocultural understanding, we will also show how exploring the nature of place-making can shed new light on the nature of imaginative development and lead to the identification of new tools and strategies for the imaginative educator.

IMAGINATIVE EDUCATION AND UNDERSTANDING OF PLACE

Space precludes a full account here of Egan's theory of imaginative development (Egan, 1988, 1990, 1997). Our focus will be on its curricular and pedagogical implications, which Egan himself has explored in a number of works (Egan, 1986, 1992, 2006). Three concepts play an especially central role in this work: cognitive tools, kinds of understanding, and structuring learning as a narrative. We shall briefly review each of these and consider how they influence teaching for place-making.

Egan argues that the individual imagination develops by acquiring and mastering "cultural tools" from the social environment, as Russian psychologist Lev Vygotsky (1962, 1978) argued was the case in mental development in general. Once mastered, such a tool is available to guide inner psychological processes, becoming, in Egan's term, a "cognitive tool." Tools of particular interest for the development of the imagination will tend to be both emotionally engaging and intellectually stimulating; one task of the imaginative teacher is therefore to work out how such tools can be made available to the learner in the context of any particular learning situation.

The challenge is made more complex by the fact that different ways of using language give rise to different sets of tools. Egan distinguishes between the tools developed and used in oral language communities, in communities across broader geographic zones linked by widespread literacy, and in specialized discourse communities organized around shared ideas. Each cognitive "tool kit," he suggests, tends to promote a general kind of imaginative "take" on the world, termed a "kind of understanding." For the tools of oral language, Egan terms this imaginative style of thinking Mythic understanding; for the tools of literacy, Romantic understanding; and for the tools of theoretic discourse, Philosophic understanding. Each kind of understanding has some characteristic strengths, but also significant limitations, so that another challenge for the imaginative teacher is to guide the learner's development so that, as a new toolkit is acquired, the new kind of understanding does not end up suppressing the others.

Table 1 summarizes the main cognitive toolkits outlined by Egan in *An Imaginative Approach to Teaching* (2005). He envisions the Mythic set as being primarily of use for children up to the age of eight or so, the Romantic set as useful up to about age 15, and the Philosophic set as characterizing the last years of high school. Not included here are the other two kinds of understanding referred to in his work, Somatic (the embodied knowledge of the world that underlies linguistic understanding), and Ironic (a reflexive, self-limiting and inclusive mode of understanding that embraces all of the other kinds). Egan is inclined to see these as less relevant to classroom teaching, and although we do not fully agree, in this article we follow his lead in focusing primarily on Mythic, Romantic, and Philosophic kinds of understanding.

In order to guide teachers (and others, e.g., parents) in developing these kinds of understanding, Egan (2005) offers what he calls "planning frameworks" to help shape imaginative curriculum units. After deciding what kind of understanding one wishes students to develop, one looks for something about the topic that seems likely to spark an emotional response, and then plans, at

TABLE 1
The Cognitive Toolkits (Egan, 2005)

A Toolkit for Learning/Mythic Understanding
Story/metaphor/binary opposites/rhyme, rhythm and pattern/jokes and humour/mental imagery/gossip/play/mystery
A Tool Kit for Literacy/Romantic Understanding
The sense of reality/the extremes of experience and the limits of reality/association with heroes/the sense of wonder/collections and hobbies/knowledge and human meaning/narrative understanding/the capacities for revolt and idealism/changing the context/the literate eye
A Tool Kit for Theoretic Thinking/Philosophic Understanding
The sense of abstract reality/the sense of agency/grasp of general ideas and their anomalies/the search for authority and truth/meta-narrative understanding

least in outline, a narrative journey for the students in which they will develop their knowledge of the topic through the use of (some of) the appropriate set of cognitive tools. Like linguistic narratives, Egan's units generally begin with some kind of unresolved tension or issue (something surprising, dramatic, mysterious), complicate it further, and finally resolve it in some way, while often pointing to the prospect of learning much more in future units.

Even in outline, Egan's (2005) work suggests that the imaginative dimensions of place-making will be quite complex. It appears, to begin with, that a school that wishes to help its students develop a deep and meaningful relationship with the place where they live will need to consider at least the following ways of making sense of it:

- *Somatic:* becoming familiar with the sights, sounds, odors of the place, with different ways of moving through it, with its moods in different weathers and at different times of day, and so on;
- *Mythic:* learning to talk about the place, with its characteristic names and qualities, its founding stories, its contrasts (e.g., beautiful/ugly, quiet/noisy, safe/dangerous), its songs, jokes, and iconic images;
- *Romantic:* coming to know the tapestry of human meaning woven with the place, its heroes and villains, extraordinary events, peculiarities and specialties, its games and festivals;
- *Philosophic:* uncovering the place's relationship with other places, the ways it conforms to or stands out from established patterns, the sweep of its natural history, geography, demographics, economy;
- *Ironic:* coming to grips with the diversity of experiences and perspectives available for understanding the place, from inside and outside alike, and locating oneself within them.

Yet this is still a general sketch of the terrain, derived from an educational theory that has no particular focus on place or on the natural world. If one is interested in engaging the imagination with place, are there other kinds of cognitive tools—in addition to those identified by Egan (2005)—that might form part of the place-based educator's "tool kit"? To answer this question, we need to probe a little more deeply into the foundations of Egan's theory.

GRASPING THE WORLD: A NEW TAKE ON COGNITIVE TOOLS

What Egan (2005) calls cognitive tools are really *imaginative* tools, or even characteristic traits or preoccupations of the imagination—widespread cultural strategies for engaging "heads, hearts, and hands" with the world. But Egan offers no particular method for identifying these tools, and his lists and descriptions often seem somewhat idiosyncratic, even when embedded in a persuasive overarching argument. This makes it difficult for others to build on or extend his general scheme.

We propose reinterpreting Egan's (2005) "cognitive tools" as outward expressions of a set of underlying *imaginative capacities* that remain the same across kinds of understanding (Fettes, 2010). That is, culture supplies a variety of tools for developing and engaging the imagination, and this "toolkit" varies according to the dominant mode of language use, among other factors; but the imagination employs such tools for broadly similar purposes at each level. By assuming these capacities or purposes to be constant, we can trace relationships among sets or families of tools—e.g., a tool at the Mythic level connecting with a Romantic tool connecting with a Philosophic tool. Fettes (2010) has proposed the term "tools of imaginative engagement" (TIEs)

in connection with this theoretical shift (p. 5). This approach to identifying TIEs would both exclude some of Egan's "cognitive tools" as not being "tool-like" enough (for example, "the sense of wonder"), and allow new ones to be identified by researchers and educators. The following five criteria summarize what to look for:

1. A TIE must be related to an underlying imaginative capacity that is not unique to a particular kind of understanding. (Fettes, 2010, offers a non-exhaustive list of eight such capacities: "grasping wholes," "grasping detail," "grasping composition," grasping regularity," "grasping possibility," "grasping struggle," "grasping indices," and "grasping inconsistency." [p. 3])
2. A TIE must fit within a particular kind of understanding, taking into account its overall characteristics and functions (linguistic, cultural and psychological).
3. The series of TIEs related to a particular imaginative capacity must display the same kinds of internal tensions, e.g., between kinds of understanding, as characterize the overall theory.
4. Each TIE must be realized in a variety of ways in different cultures and by different people or, at least, the possibility of such cultural and individual differentiation should be evident.
5. A TIE must plausibly lend itself to the practice of imaginative teaching and learning.

Take the foundational imaginative capacity of "grasping possibility." In order to identify the cultural tools that are taken up by the imagination for this purpose, we must consider how the exploration of possibilities, of "what ifs," is given characteristic form by means of oral, written and theoretic language. Since this implies a playful shifting of perspectives and ideas, we might try focusing on the changing qualities of play in the context of Mythic, Romantic, and Philosophic understanding.

The distinctive traits of oral language/Mythic play are evident in the preschool or kindergarten classroom, at home or on the playground: this is perhaps the most familiar and widely acknowledged genre of imaginative play. Asked to give it a label, we might call this TIE "social and dramatic play." Teachers using it to teach a particular topic will look for ways to engage children in making up stories, taking on roles, and responding to one another and to the topic in open-ended, improvisational ways. Costumes, props, settings, and characters are some of the various resources important to making this happen.

A rather different kind of play appeals to the literate, Romantic imagination. This is the kind of understanding that relishes formal games of all kinds: board and card games, strategy and chance games, solitaire and multi-player games, and so on, along with dramatic and physical games constrained by formal rules. It is also a kind of understanding that builds elaborate virtual fantasy worlds governed by certain laws, traditions, and languages. A teacher guided by the theory of imaginative education will therefore engage students in designing games of increasing complexity and detail, or in building shared fantasy worlds that incorporate their growing understanding of a topic.

In the case of the Philosophic imagination, play is often neglected, both theoretically and practically. Yet "grasping possibility" is as central to this kind of imaginative understanding as any other, from Einstein's famous "thought experiments" to Google's allocation of regular employee time to working on off-the-wall ideas. We might characterize this mode of imaginative engagement with possibility as "hypothesis, experiment, and playing around with ideas." A

teacher guided by the theory of imaginative education might model this playfulness by proposing idiosyncratic explanations from time to time and asking students how they could test or refute them; inserting bizarre questions or challenges in a quiz; encouraging students to try to prove the opposite of received truths; or dedicating time to "invention cafés" designed to stimulate original ideas and questions.

This series of TIEs illustrates how one can identify a familiar category of imaginative activities in one kind of understanding—in this case, young children's propensity for social and dramatic play—and connect it to an underlying imaginative capacity—grasping possibility—that finds equivalent expression in other kinds of understanding, thereby enriching our picture of how the latter can be intentionally developed and deepened. This process can begin in any kind of understanding; very often, because of the prevalence of Romantic engagement in our culture, it is the Romantic TIE that provides the most obvious starting point. Such is the case as we turn to the question of whether it makes sense to add a place-based set of TIEs to the imaginative educator's toolkit.

GRASPING SITUATION: A SET OF TOOLS FOR ECOLOGICAL EDUCATORS

Continuing with the long-established metaphor of the imagination's "grasping" the world (Fettes, 2010), we might now ask whether the foundational imaginative capacities include a propensity for "grasping situation"—that is, for understanding phenomena in terms of their relationship to place. This seems a credible idea, on the face of it, given that humans have little instinctive sense of habitat or territory and are therefore more dependent on the elaboration of cultural tools, or "prostheses," to guide their understanding of place (Livingston, 1994). We might therefore look for signs of widespread cultural strategies for imaginatively engaging with place that correspond with Mythic, Romantic, and Philosophic kinds of understanding.

Whether it be tree houses perched precariously among the branches of neighbourhood trees, inviting hollows in dense shrubbery, lean-to structures of scrap material in vacant lots, or a sheltered space under the jungle gym at a nearby park, children everywhere seem to love forts. Sobel (1993, p. 74), basing his claims on research in Devon (England) and the island of Carriacou in the West Indies, argues: "The small, manageable world of the fort, with everything pulled inside, is calm and reassuring. It provides a protective barrier within which personal forces can be summoned to deal with the onslaught of otherness." This invocation of "personal forces" strongly recalls Egan's conception of Romantic understanding, as driven in large part by an urge to comprehend the nature and bounds of reality and one's own place in it (Egan, 1997).

Taking fort-building as a prototypical expression of a Romantic TIE for grasping situation allows us to think more deeply about the cultural tools involved. Whereas Egan focuses primarily on the tools of language, fort building seems to require direct creative engagement with the physical world. While this resembles the kind of engagement most ecological and place-based educators see as crucial to children's development, it ties such engagement to an appetite for the heroic and the idiosyncratic that is often neglected in all forms of education. And so we might want to broaden this TIE to include the efforts of pre-teens and adolescents to decorate and personalize their "private" spaces, whether it be their bedrooms, textbook covers or school

lockers—all are aspects of this Romantic predilection for creating special places, even in the most urbanized and crowded contexts.

This suggests that, in order to identify a Mythic TIE for grasping situation, we need to consider how Mythic understanding works. Unlike Romantic understanding, it is not particularly concerned with a sense of reality, nor with the elaboration of one's own identity. It is an essentially *participatory* understanding, one in which boundaries are blurred and meanings cross easily between human and more-than-human worlds. Talking animals, people who transform, magic and mystery, ritual and rhythm—all these are central components of Mythic understanding and, thus, the Mythic imagination (Egan, 1997). Objects and actions that symbolize or enact a collective sense of place, and that blur the lines between place and self, are therefore good candidates for the Mythic equivalent of fort-building.

At the level of the family and home, one tool for creating place seems to be the selecting of special objects that are always there, or that can be carried along: for children; they include blankets, teddy bears, articles of clothing, toys, or books. We know many parents (ourselves included) who would rather lose their wallets than misplace the beloved "binky" or "bear bear" which conveys to the child a deep sense of belonging, of being at home in the world. The same might be said about the small rituals that structure family life: their meaning comes not from the actions themselves so much as their capacity for representing home-ness to the child. And if one casts the net wider, to include the adult culture around the home, one observes similar patterns. The raising of a flag or sign, the enactment of a ceremony or custom, are ways of establishing place that still have a deep hold in our culture. Outdoor education camps often make use of such rituals to develop among participants a shared sense of place, quickly and effectively. We shall consider in the next section what other educational uses might be found for this TIE.

If we think of the Mythic imagination working with emotionally resonant symbols of place, and the Romantic imagination drawing on the stuff of reality to create small havens of emotional order, we can ask what the Philosophic imagination might do to "grasp situation" within the realm of ideas. We are particularly interested in activities and strategies that are general enough to apply across all the various disciplines that might have a particular concern with place, ranging from geology and ecology at the "nature" end of the spectrum to architecture and gardening at the most specifically human. How is location, or situatedness, made accessible to the Philosophic mind?

A plausible answer seems to be through the imaginative creation of maps and plans. Every discipline that deals with place develops its own variations of the theme of mapping as a means of focusing awareness on the most significant features of a place and the relationships between them. It is a typically Philosophic activity, involving constant abstraction from gritty and context-bound particulars to a more purified, abstract kind of meaning in the realm of extra-local concepts and phenomena. And it has other traits one expects to find in a mode of imaginative engagement: it arouses intellectual passion, it can become all-absorbing for particular individuals or groups in certain circumstances, and it is infinitely adaptable to varying aesthetic and cultural preferences.

This brief exploration has thus served to highlight certain widespread cultural activities that seem to play an important role in developing an imaginative understanding of place, but are undervalued and therefore little used in education. While space precludes a more exhaustive analysis, the three main sets of cultural strategies described—enacting place through symbol and ritual, creating special personal places, and the making of maps and plans—plausibly fulfil the first four of the criteria outlined above for identifying tools of imaginative engagement. It

remains for us to show in the final section how these can be productively deployed as part of an imaginative approach to place-based education.

PLACE-MAKING FOR THE IMAGINATIVE TEACHER

One of the key tenets of imaginative education is that any topic can be made relevant and memorable to children (or, indeed, adults) by the artful use of cognitive tools (Egan, 2005). One might therefore ask whether any topic can also be meaningfully connected to place in the same way, using the TIEs for "grasping situation" in particular, although other tools of imaginative engagement should not be ruled out. Evidently, in the confines of this article, we can only supply a few examples (drawn from the British Columbia, Canada, curriculum), that must serve as tentative pointers to a vast range of possibilities awaiting exploration.

Example One: Ecology Through a Place-Based Imaginative Lens

As a first example, we could take a topic with an obvious connection to place. In the BC Grade 4 science curriculum (BC Ministry of Education, 2005), one set of learning outcomes has to do with basic ecology:

- compare the structures and behaviors of local animals and plants in different habitats and communities;
- analyze simple food chains;
- demonstrate awareness of the Aboriginal concept of respect for the environment; and
- determine how personal choices and actions have environmental consequences.

Evidently these topics could be (and often are) taught without highlighting the significance of place, despite the reference to "local animals and plants." In the following unit, however, the Romantic TIE of "creating special places" is used to link all of the curriculum content to a knowledge and love of place, and to the ethical commitments that flow from such connections.

We might begin by asking students to list as many different kinds of living things as they can identify or describe between their home and the school. This will set up one of the basic tensions in the unit, between a view of the world as dominated by humans and a more "ecological" view in which humans are only one of many kinds of creature sharing a given place. It is this latter, less familiar view that will be emphasized through the use of tools of imaginative engagement. Students can be asked to describe, diagram, or model the perfect "special place" for each kind of living thing, thereby developing their Romantic grasp of situation. What kinds of places do worms especially like? What do crows like? What do trees like? Direct observation of a chosen species or a chosen place can be encouraged and the details shared day by day, giving rise to more and more detailed depictions of the "special places" created by the students. In line with the fort-building tradition, part of the design of each "special place" might involve thinking about how to keep at bay the creatures further up the food chain as well.

Once the importance of place to each kind of living thing is vividly established in the students' imaginations, they might be asked to imagine an "urban planning" conference of all of the living things together—each student representing a species. In the midst of their deliberations about the design of a perfect place for all of them to live, the teacher can introduce a new problem:

an immigration request by humans. The teacher (aided by suggestions from the students) will be frank about some of the less neighborly tendencies of humans, and so the conference will come up with some suggested guidelines for living in a place in harmony with other living things. These might then be compared with Aboriginal teachings on respect for the environment, demonstrating to the students that they have begun to think "indigenously" about the place where they live.

Example Two: Canadian History Through a Place-Based Imaginative Lens

Our second example aims to show how a topic with less obvious connections to place can be taught in ways that engage place-making tools. In the BC Grade 10 Social Studies curriculum (BC Ministry of Education, 2005) the prescribed learning outcomes related to the general theme of "Identity, Society, and Culture: Canada from 1815–1914" require students to:

- analyze Canadian society from 1815 to 1914 in terms of gender roles, ethnicity, daily life, and the arts;
- evaluate the impact of interactions between Aboriginal peoples and European explorers and settlers in Canada from 1815 to 1914;
- evaluate the influence of immigration on Canadian society from 1815 to 1914; and
- describe the factors that contributed to a changing national identity from 1815 to 1914.

The scope of this unit will tend to dilute any emphasis on place, unless the imaginative tools of place-making are made central. We exemplify such a focus in the context of Maple Ridge, a city situated in the Fraser Valley on the outskirts of Vancouver, BC—but the same approach might be applied to any community.

Our first priority will be to develop an imaginative understanding of daily life in Maple Ridge throughout the 19th century, from the life of the local Aboriginal peoples through the arrival of farmers and the slow growth of industry and commerce. Using the TIEs for grasping situation, we will ask students to imaginatively re-create "special places" for a range of inhabitants, to identify and re-create shared rituals and objects that served as a focus of community life, and to sketch various maps of the area showing the interaction of people and place over time.

This imaginative engagement will be deepened through the use of other TIEs—for instance, the heroic qualities and remarkable lives of the particular people involved in the creation of Maple Ridge. We will introduce James William Sinclair, who in 1874, at the age of 17, arrived in the area with only the clothes on his back, a beaten-up suitcase, and a tattered map of the world. He had been hired as the area's first teacher. And Chief Constable Edmund Pope, Maple Ridge's first policeman, someone who much preferred a life of adventure than settling down (or at least staying settled with this wife and young children), and who had his fair share of run-ins with the law before finally being hired to enforce it. We will highlight the extremes of experience accompanying the fur trade and the gold rush, the struggle of the local Katzie people to preserve their identity and land rights, and the fortunes made and lost as the local population grew.

Only with this connection to place established will we start to consider the national picture—Canada as a mosaic of interlinked local identities that overlap in complex ways. One route into this will follow the early settlers' connections to other places like Fort Langley (the local Hudson Bay Company outpost), New Westminister (a seat of early local government), to Vancouver and Victoria, or even back to the "Crown" across the Atlantic. Another will involve

comparing Maple Ridge with a variety of other communities across Canada, enhancing the students' sense both of its distinctiveness and of the diversity of place in Canadian history. Here again the TIEs for grasping situation will prove useful: characterizing communities through their common symbols and rituals, through personal histories and special places, and through the use of maps and plans that will help to make them imaginatively accessible and memorable. Canadian "national identity" will be seen as something inextricably intertwined with the local, reaffirming the importance of place in the country's history.

Prospects for Place-Based Imaginative Education

These two short examples from the science and social studies curricula in British Columbia are intended only to illustrate the potential usefulness of an imaginative approach to place-based education, and the pedagogical value of the "tools of place-making" outlined previously. A fuller elaboration of this approach is clearly called for (Judson, in press, 2008). It will also be of value to compare curriculum units (and teaching strategies) informed by this framework with the practices of other ecological and place-based educators. We expect such an analysis to identify a range of successful imaginative strategies already in use, along with many unexplored possibilities for engaging learners' imaginations more deeply with place throughout the curriculum. But we also anticipate that such an analysis may highlight ways in which unexamined assumptions about teaching and learning undermine and misdirect current efforts to educate for ecological awareness.

A curriculum such as that of Project WILD (Council for Environmental Education, 2003), for instance, offers many engaging activities and important ideas and concepts for the development of ecological awareness. But there is no explicit developmental framework guiding the design and sequencing of the units, as in the imaginative approach described here, and so teachers using these resources must rely to a great extent on their own instincts or simply on whatever fits most conveniently into a particular day or a particular topic in the state curriculum. Furthermore, throughout this curriculum, like many others, there is an unacknowledged tension between the universalist conceptual framework of science and the local and particular nature of ecological experience, with the former dominating. Place-based imaginative education, we argue, can resolve this tension productively by involving learners in active reimaginings of place that are nourished by both scientific knowledge and direct experience; and this is to be done through the deliberate, artful development of the tools of imaginative engagement and different kinds of understanding.

Although imaginative education, in its original formulation, accords little attention to the specificities of place, we have shown that some of its key concepts can readily be adapted to the particular values and concerns of place-based education. Moreover, the theory offers a new lens for assessing any initiative in place-based education for its potential to engage the imagination, and thus a new theoretical perspective for understanding why some lessons, units, and programs may be more effective than others in developing a deeper understanding of and attachment to place. While potentially useful in its present form, we also view the theory as in need of further elaboration and modification, in part on the basis of practical experience across diverse classrooms and communities. We invite others to join us in this exploration.

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